

IN THE SPECIFICATION:

Paragraph beginning at line 2 of page 1 has been amended as follows:

The present invention relates to thin-film deposition and etching processing employing focused beams of charged particles such as ions and electrons.

Paragraph beginning at line 18 of page 1 has been amended as follows:

Source gas is blown or injected from a gas gun 6 in the direction of the vicinity of the surface of the sample 9 to be subjected to deposition mounted on a sample stage 7 in the case of processing by deposition.

Paragraph beginning at line 4 of page 3 has been amended as follows:

Further, when a process is to be performed where a hole is to be made in the pattern at the sample surface, a region of the pattern to be irradiated ~~of the pattern~~ is set and patterning is performed ~~implemented~~, and even if the ion beam acceleration voltage and beam current is kept constant and the number of scans is the same, portions at the periphery of the pattern tend to be formed so as to be inclined in an obtuse manner.

Paragraph beginning at lin 15 of page 3 has been amended as follows:

~~Let the~~ The scanning of a focused ion beam having this kind of normal distribution in one direction will now be considered.

Paragraph beginning at line 1 of page 6 has been amended as follows:

This then results in an ineffective process where a scanning region is set for every pattern and individual processing is carried out even for ranges where beam scanning is possible.

Paragraph beginning at line 4 of page 6 has been amended as follows:

In order to resolve the aforementioned problems, it is ~~the~~ an object of the present invention to provide a processing method and device thereof capable of processing in a uniform manner so that deficiencies in the pattern boundary regions do not occur while at the same time enabling simultaneous processing of a plurality of patterns when performing deposition processing or etching processing on a prescribed pattern using a focused ion beam apparatus.

Paragraph b ginning at line 13 of page 6 has been amended as follows:

In the processing method of the present invention, there is implemented irradiation with a charged particle beam in such a manner that, when executing processing in a uniform manner ~~matter~~, when deposition processing or etching processing of a prescribed pattern is carried out using a charged particle beam apparatus, a region of the pattern to be processed is divided up into microscopic regions each being slightly smaller in size than ~~corresponding to~~ the diameter of the beam, and regulation is performed by scanning circuits etc. with processing proceeding simultaneously for a plurality of patterns within the scanning region in such a manner that the dose amount for each microscopic region becomes equal.

Paragraph beginning at line 25 of page 8 has been amended as follows:

In FIG. 2A, "a" is an isolated microscopic pattern, and "b" is large pattern having a narrow zone or portion.

Paragraph beginning at line 6 of page 9 has been amended as follows:

Comparing the ion dose amount for the individually divided microscopic regions when executing beam scanning at a

designated pattern region, a value for the dose amount at peripheral parts of the pattern boundaries shown as thinly applied regions in FIG. 2A and 2B is lower than a value at the central parts (shown as thickly applied regions). In the present invention, the scanning frequency is adjusted so that the dose amount becomes the same as for at the center for regions where the dose amount is insufficient. However, this differs depending on the extent of dosage insufficiency ~~to~~ which ~~of~~ each microscopic region of the plural regions for which the dose is insufficient ~~are insufficient~~ and ~~depending~~ also depends on where the region is positioned on the pattern.

Paragraph beginning at line 3 of page 12 has been amended as follows:

The ion beam processing of the present invention divides the region to be scanned into microscopic regions corresponding to the beam diameter and ~~seans~~ of the required number of scans ~~times~~ is carried out on the individual regions. Scanning is therefore carried out regardless of the size of pattern regions which was the case in the related art. It is therefore not necessary to individually execute processing of a plurality of patterns at scannable regions. This means that processing can be ~~proceeded~~ performed with at the same time even when the processing thickness (depth) differs between patterns, to ~~give~~ provide a superior processing efficiency.

Paragraph beginning at lin 25 of pag 12 has been amended as follows:

An embodiment of a focused ion beam deposition system adopting the method of the present invention will now be described with reference to Fig. 4. First, the sample to be processed 9 is mounted on a sample stage 7 and the surface of the sample 9 is scanned with an ion beam 2. Expelled secondary charged particles are then detected by a secondary charge particle detector 5 and a microscopically observed image is displayed on a display 11.